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NIGERIA

**PROJECTED LEVEL OF DEMAND,
SUPPLY, AND IMPORTS OF FARM
PRODUCTS IN 1965 and 1975,**

With Implications for U.S. Agriculture

PREFACE

The United States Department of Agriculture contracted with the Department of Political Economy, University of Edinburgh, Scotland, to prepare a projection of supply, demand, and trade in Nigeria. The independent, unabridged study (149 pages of text, charts, and tables) was published by the U. S. Department of Agriculture under the title, Nigeria: Determinants of Projected Level of Demand, Supply, and Imports of Farm Products in 1965 and 1975, ERS-Foreign-32. The comprehensive study utilizes accepted methodology and is based on realistic assumptions. It provides a rational projection of the import demand in 1965 and 1975 for selected agricultural products.

The major findings of the above report are now summarized in this shorter report. Conclusions are set forth, and implications of the projections to U. S. agriculture presented.

The work is under the general supervision of the Director, Foreign Regional Analysis Division, Economic Research Service, U. S. Department of Agriculture, Washington, D. C., 20250.

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NIGERIA: PROJECTED LEVEL OF DEMAND, SUPPLY, AND IMPORTS OF FARM PRODUCTS IN 1965 AND 1975, WITH IMPLICATIONS FOR U.S. AGRICULTURE

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SUMMARY OF IMPLICATIONS OF THE STUDY TO U. S. AGRICULTURE

Nigeria is a republic within the British Commonwealth of independent nations. In 1962 total imports of foodstuffs (excluding fish), drink, and tobacco items were valued at \$55.8 million. This represented 10 percent of that nation's imports of goods, a percentage which has not changed noticeably since 1954. A substantial part of Nigeria's agricultural imports of wheat and tobacco are from the United States. U. S. shipments of wheat and wheat flour to Nigeria have risen considerably during the past decade. They ranged from 1 to 2.6 million bushels, wheat equivalent, from 1954 through 1962. The recent opening of a flour mill near Lagos resulted in wheat replacing wheat flour as an import product. Imports of unmanufactured tobacco from the United States have been 2.8 million pounds per year, but there has been no tendency for imports of American leaf tobacco to rise, since Nigerian production has been expanding. Exports of U. S. dairy products to Nigeria have consisted almost entirely of milk powder donated under Public Law 480.

U. S. wheat exports to Nigeria are projected to reach, at a minimum, 2.2 million bushels in 1965 and 4.2 million bushels by 1975. The United States may also export about 2.8 million pounds of unmanufactured tobacco to Nigeria in 1965 and in 1975. Projections show commercial exports of powdered milk reaching 3,100 metric tons by 1975 (table 1). On a percentage basis the United States may expect to supply at least 67 percent of Nigeria's wheat and tobacco needs in 1965 and 1975 and at least 20 percent of her dry milk needs in 1975.

GENERAL PROCEDURE OF THE STUDY

The original study, prepared by the University of Edinburgh, is a contribution towards the Department of Agriculture's worldwide program of developing long-range projections of the supply and demand for farm commodities. This study, together with similar ones from other countries, will help form a basis for making decisions with reference to resource adjustment and general agricultural policy in the United States.

To estimate within certain limits how the demand and supply for agricultural products may be expected to develop in Nigeria by 1965 and 1975, the University of Edinburgh adopted a twofold approach. First, to get an overall view of the Nigerian economy, the following aggregative relationships which have developed during recent years in Nigeria were utilized: The population, national product, and Nigeria's economic position vis-a-vis the rest of the world.

The second approach dealt with the relationships of consumption (demand) and domestic production (supply). To establish the pattern of consumption toward which Nigeria is now moving, or of a particular range of commodities, any realistic estimate must be based primarily on the relationship between such consumption and income. This analysis must be modified by consideration of the occupation, religion, and locality of the consumers; the extent of occupational and geographical mobility; and the effects of time.

Table 1.--Nigeria: Imports of selected commodities, total, and from the United States, 1960 and projected 1965 and 1975

Commodity	Unit	1960		1965		1975	
		Total	From U. S.	Total	From U. S.	Total	From U. S.
Wheat flour ^{1/}	1,000 bu.	3,147	2,592	0	0	0	0
Wheat	do.	0	0	3,300	2,200	6,300	4,200
Tobacco, unmd.	1,000 lb.	4,125	2,838	4,200	2,800	4,200	2,800
Cigarettes	1,000	110,800	6,400	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>
Dry milk	1,000 m.t. ^{3/}	1.6	0.1	3.6	.5	15.7	3.1
Condensed milk	do.	10.0	<u>4/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>
Meat products	do.	2.8	0.2	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>

^{1/} Grain equivalent.

^{2/} No projection made. The United States is not expected to be a significant source of supply for this commodity in year indicated.

^{3/} Metric tons contain 2,204.6 pounds each.

^{4/} Less than 100 metric tons.

To illuminate these effects, the University of Edinburgh used a cross-section approach. These were surveys of the consumption of a sample of households over a short period of time. For any one survey, this sample was usually drawn from a particular locality, but the households varied in income, occupation, and place of origin. Analysis of the supply of agricultural products was more difficult because the domestic production of agricultural products that are largely consumed within the country cannot be stated with numerical precision. Statistical data are much more adequate for export commodities.

EVALUATION

Studies dealing with long-term economic projections are necessarily subject to the limitations inherent in a supply-demand study. First, long-term projections concerned with economic magnitudes are inevitably based on a wide range of assumptions which may or may not hold true over the projected period. Second, assumptions about consumer behavior, changes in tastes, and preference patterns may be deceptive in a society undergoing rapid change. Third, the conditions determining the level of production do not lend themselves to quantitative measurement in terms of gains or losses. Finally, it is imperative to recognize the deficiency of available statistical data. Nigeria, a country in the early stages of development, lacks adequate statistics on nearly all phases of the economy. These limitations must be kept in mind as the implications of the original study are interpreted.

Although the Edinburgh study fills a large gap in the information on factors affecting agriculture in Nigeria, it has certain shortcomings. The demand projections for the various commodities depend heavily on national estimates. While a cross-section approach was used to determine the relationship of the consumption of agricultural products to income, both by the population and by particular categories, the results obtained indicate that expenditures on imported food products in rural areas are approximately equal to those in urban areas. Possibly

a more extensive consumer survey would show more purchasing by the urban sector where there is much higher per capita income. Income elasticities were developed, but again, more basic data were needed to make them more reliable. The study does not quantitatively project through 1975 the import demand for each agricultural product dealt with; this is left largely to reader interpretation.

Also, the study contains limited import and export data. The tables which are presented herein contain data obtained from Nigeria Federal Office of Statistics, Nigeria Trade Summary; and Nigeria Department of Customs and Excise, Trade Report.

STUDY FINDINGS AND IMPLICATIONS

The Nigerian Economy

Population

Nigeria is a big country; its population of approximately 40 million in 1962 is the largest in Africa. While Nigeria's population growth may accelerate in the next generation, medical facilities are inadequate and the death rate may remain high. By 1965 the population may approach 43 million and by the early 1970's, it may reach 50 million. These population projections are made on the basis of the 1952-53 census and assume an increase of approximately 2 percent per year. ^{1/}

Population projections are of great importance in forecasting demand for consumer goods since the aggregate demand for a product is the total population multiplied by the per capita demand.

Economic Growth

The per capita demand for a commodity depends heavily upon an individual's income. Therefore, projections of income, like population, are important in a study of demand forecasts.

The primary aim of the Nigerian Government is to raise per capita income and the standard of living as rapidly as possible. To attain this goal, the Federation of Nigeria has embarked on a 6-year development plan (1962-68). The plan foresees an annual growth rate in gross domestic product (GDP) of 4 percent resulting from gross investment at a rate of 15 percent GDP. Allowing for an estimated population growth of 2 percent per year, this permits a small increase in private consumption and investment. Public investment by the federal and regional government, over the plan period, is projected at \$2.1 billion and private investment at \$1.2 billion. Domestic resources from taxation, internal borrowing, and other sources are expected to provide roughly half the total investment. The Government hopes for public foreign aid of \$899 million and foreign private investment of \$518 million to provide the remaining portion and to cover an expected balance of payments gap of \$1.4 billion.

^{1/} A census taken in November 1963 placed the Nigerian population at 55.6 million. This figure is preliminary, pending approval by the regional governments of the Republic and there is some question as to the validity. If population is much higher than that on which this study is based, findings of this study would have to be adjusted accordingly. Demand for all food and supply of non-commercial commodities are based largely on per capita estimates.

Based on a slowly expanding farm output, which should provide at least a minimal subsistence diet for many years to come, and a small but rapidly growing nonagricultural sector, Nigerian GDP can be expected to advance somewhat. By 1965 the figure is likely to be \$3.5 billion (at 1957 prices), affording an average annual income per Nigerian of \$85, and by 1975 the tentative estimate is \$4.5-\$5 billion, which would provide a per capita income, again at 1957 prices, of \$90-\$95. A 1975 GDP of \$4.5 billion would represent an increase of 67 percent over the 1955-57 figure. This rate of increase is within the country's grasp, provided no crisis of confidence in Nigeria's administrative cohesion and political stability occurs. It must also be assumed that the expected trade gap will be financed by aid of some kind, either loans or outright grants.

Nigeria's balance of trade position is highly dependent on agricultural products. In 1961 agricultural imports amounted to \$56.3 million--9 percent of total imports. Although the value of imported agricultural products has been increasing since 1954, it has remained a relatively constant percentage of the value of total imports.

Nigeria's agricultural exports, valued at \$386.6 million in 1961, represented 81 percent of her total exports. Major exports include cocoa, oilseeds, vegetable oils, cotton, and rubber. With the bulk of the nation's exports dependent on a few basic crops, the country is sensitive to crop failure and price fluctuations in the world market. Nigeria had a surplus balance of trade until 1955 when world supplies of cocoa and other products began exceeding world demand. Since 1955 Nigeria has had a deficit balance of trade. From 1954 through 1962 this deficit averaged \$98 million per year (table 2). As long as agriculture remains the dominant industry and agricultural exports make up most of Nigeria's receipts from overseas, her economic expansion will remain closely tied to the markets available for these products.

The direction of Nigerian exports from 1954-62 changed quite drastically--the United Kingdom taking relatively less and the European Economic Community (EEC) nations buying progressively more. In 1954 Britain took nearly three-quarters and the EEC countries about one-seventh, but by 1962 the EEC share was about one-third with Britain's purchases from Nigeria below one-half.

Nigeria's relationship with the EEC remains to be determined. Talks are being conducted concerning the elimination of the EEC tariff barriers to Nigerian products. Nigeria's trade patterns will be altered if these negotiations bear fruit.

Table 2.-Nigeria: Balance of trade 1954-60

Year	Imports	Exports	Surplus (✓) or deficit (-)
		-1,000 dollars	
1954.....	319,394	418,691	✓ 99,297
1955.....	381,127	371,094	- 10,033
1956.....	427,755	376,804	- 50,951
1957.....	426,910	357,095	- 69,815
1958.....	465,568	379,540	- 86,028
1959.....	499,535	457,771	- 41,764
1960.....	604,494	475,198	- 129,296
1961.....	622,729	485,669	- 137,060
1962.....	568,425	472,140	- 96,285

Nigeria valued its total exports to the United States in 1958 at \$22.6 million and its imports from the United States at \$27.3 million. Exports to the United States in 1962 came to \$50.7 million, 11 percent of Nigeria's total exports, while imports from the United States totaled \$41.9 million, 7.2 percent of the total imports.

Supply of Agricultural Commodities

Over four-fifths of the population of Nigeria depends on agriculture, forestry, and fisheries for livelihood. More than half of Nigeria's GDP is derived from these sources. The expansion and modernization of agriculture and related industry are of vital importance to the development of the Nigerian economy. Efficient expansion of domestic food production will not only make it possible for the Nigerian people to eat better, but also reduce dependence on imported foodstuffs. Increased productivity of agriculture will raise the income of the majority of the people, and this in turn will increase the size of the domestic market for the expected new industries. Proceeds from export products will determine to a large extent the volume of imports which can be made available for economic development in other sectors.

Statistics covering quantities and values of total agricultural output in Nigeria are not available. Many farm products are produced solely for domestic consumption. A high proportion, possibly up to four-fifths, of this produce is not marketed at all but used right on the farm where it is produced. In these circumstances, measuring supply elasticity for yams, cassava, grain sorghum, corn, brans, etc., is difficult. Available information, however, indicates that Nigeria has an adequate supply of most foods to meet the body energy needs of her population. The output of foodstuffs, including grain and livestock products, will generally move slowly ahead under the stimulus of a rising rural population, so there is little fear of a reduction in dietary standards through 1975.

While Nigeria can supply the caloric needs of her people, the protein needs are not being adequately met. Should Nigerians want a nutritionally more adequate diet the farmer would have to respond to these demands. If the farmer does not adapt his production to a shift in demand for more eggs, meat, dairy products, and cereals, this demand will have to be met through increased imports.

Export Crops

Numerical data are available for Nigeria's major agricultural exports (table 3). Nigeria is the world's leading exporter of peanuts and palm kernels and is also an important supplier of palm oil and cocoa beans. Between 1952 and 1960, exports of peanuts averaged 370,000 tons per year; palm oil, 180,000 tons; and palm kernels, 400,000 tons. Exports of cocoa, oilseeds, cotton, and rubber in 1962 amounted to \$326 million, 92 percent of the agricultural exports and 71 percent of the total exports.

Cocoa

In 1962 cocoa exports totaled \$93.4 million, making it the primary export of Nigeria. While the quantity produced has been increasing, the revenue obtained from exports has varied sharply with world price fluctuations. Recent experience has shown that the world cocoa market is capable of absorbing an annual supply slightly in excess of 1.2 million tons without forcing reductions in the world price. From 1955 through 1962 the yearly average New York spot "Accra" prices per long ton varied from \$983 to \$466. To stabilize the price of cocoa, government officials have talked of an international commodity agreement with production or export controls.

Table 3.--Nigeria: Exports of principal agricultural commodities, by quantity and value, 1958-62

Commodity	Quantity					Value					
	1958	1959	1960	1961	1962	1958	1959	1960	1961	1962	

Assuming a gradual rise in world consumption and no change in Nigeria's share of the world market, the Nigerian crop in 1964-66, averaged to eliminate seasonal variations, will be approximately 200,000 long tons.

By 1975 a different picture may appear. A declining world market price would induce Nigerian farmers to reappraise their prospective gains from other activities. Cultivating more intensively for food products (fruit, vegetables, eggs, possibly pork and dairy products) in areas hitherto more profitable for cocoa is likely to increase as rural-to-urban shift in the population takes place. Cocoa production, checked by a decline in new planting compared with the rate at which older trees predominate, might level off towards 1970 at 250,000 tons and thereafter decline towards its 1964-66 level of 200,000 tons.

The United States has become the major importer of Nigerian cocoa. U. S. purchases amounted to 37 percent of Nigeria's 1961 cocoa exports and 32 percent in 1962.

Oilseeds

Exports of all oilseeds and vegetable oils from 1957-61 averaged 650,000-700,000 tons (oil equivalent), an amount equal to 12 percent of world exports. Nigeria was second only to the United States as a world exporter of these products. Consequently, Nigeria is a major competitor of the United States for sales of oilseeds and oilseed products, especially to the EEC countries. Nigeria, not being a member of the EEC Association convention, is seeking a trade agreement which would lower tariffs on exports to the EEC countries. Nigeria is a major supplier of peanut and palm products to the EEC countries, and special trade preferences would affect the competitive outlook for U. S. exports of oilseeds and oilseed products to the EEC. Current U. S. exports of oilseeds and oilseed products, primarily soybeans, to the EEC have been in excess of \$300 million annually.

Future oilseed prices relative to the prices of other raw materials are likely to fall since import substitution and low income elasticity tend to alter international terms of trade against oilseed producers. Nigeria can offset slightly this adverse tendency by encouraging the manufacture of better grade oil, a development that has already benefited many producers. The gradual replacement of raw peanut exports by shipment of good-quality oil expressed in Nigeria should assist in the maintenance of Nigeria's overseas earnings. Nigerian exports of vegetable oils and oilseeds may exceed \$200 million by 1965. It is almost impossible to make any reasoned guess as to the relevant figure for 1975.

Cotton

Cotton production has been increasing, but there are sharp variances in yearly production due to weather. Nigeria exported 48,700 metric tons of cotton in 1961 and 23,200 metric tons in 1962. Exports of raw cotton go primarily to the EEC countries, the United Kingdom, and Denmark. The United States also exports cotton to these countries.

While Nigeria exports raw cotton, it imports cotton cloth. The first major textile mill in Nigeria was set up in 1957. Another plant was established in 1962. By 1966-67 five more mills should be in production. These plants will greatly increase domestic consumption of locally produced cotton.

Agricultural Imports

The projected demand for imported agricultural commodities is the gap between the projected demand for and the domestically produced supply of agricultural products. The determination of this gap includes certain assumptions as to government import policies. The choice between food imports, other consumer goods imports, and those imports required to implement the program of capital formation involves both economic and political decisions. However, the political prestige which accompanies programs of public investment in a country like Nigeria tends to prevail over the economic preferences that otherwise might result in increased imports of consumer goods. Whenever practicable, i.e. when the export earnings rise unexpectedly, the Nigerian consumer will be able to purchase more imported items. In general, however, financial discipline will require governmental intervention in the operation of an otherwise free market. The rate at which local food products can be expanded is probably sufficient, up to 1975 anyway, to influence public policy against a rapid rise in imports of agricultural commodities, except possibly those for which no close Nigerian substitute exists to satisfy both a real need and a substantial demand.

In the original study the specified projections for agriculture were related to seven agricultural commodity groups: wheat, tobacco, preserved milk, meat products, salt, refined sugar, and beer. In 1961 imports of these commodities and their products amounted to \$45.5 million, 81 percent of the total agricultural imports. The United States has a particular interest in Nigerian imports of wheat, unmanufactured tobacco, and dry milk (table 4).

Since the United States has not been and is not expected to be a significant supplier of Nigeria's salt, refined sugar, or beer, no discussion of these products is included.

Wheat

Wheat flour has been one of Nigeria's main agricultural imports. Historically, almost all of the imported wheat flour has come from the United States (82.2 percent in 1960) or Canada (16.4 percent in 1960). In 1960 this commodity accounted for 89.1 percent of Nigeria's total food imports from the United States and 22.4 percent of all her imports from this country. It also represented 13.2 percent of Nigeria's total food imports from all sources.

A flour mill located near Lagos with a capacity of 70,000 tons a year opened in June 1962. In September 1962 the wheat flour tariffs of \$21 per ton (or 15 percent ad valorem, whichever is higher) were increased to \$70 per ton (or 50 percent ad valorem, whichever is higher). Another flour mill with a capacity of 18,000 - 20,000 tons per year is planned for Port Harcourt. Nigeria now imports mainly wheat grain instead of wheat flour.

Until 1950 the baking industry, and to a large extent the consumption of bakery products, was almost completely concentrated in western Nigeria. Even today at least half the consumption and substantially more of the production remain in that region. However, in the past few years the establishment of bakeries has accelerated not only in the western region, but also in other regions, thus increasing the overall demand for wheat products. This movement was assisted by the relaxation of import licensing of breadmaking machines and the introduction of a kneading machine, which can be used for mass production.

There has been limited consumption of bread among rural people. Consumption of bread in urban areas is considerably affected by occupation and income. The introduction of bread in rural areas, plus rising incomes, indicates an expansion of Nigerian demand for wheat at a steady and substantial rate.

Table 4.--Nigeria: Total imports of selected agricultural commodities,
and imports from the United States, by value, 1954-62

Commodity	: 1954	: 1955	: 1956	: 1957	: 1958	: 1959	: 1960	: 1961	: 1962
	:	:	:	:	:	:	:	:	:
	- - - - - <u>-1,000 dollars</u> - - - - -								
Wheat flour									
Total imports..	4,860	4,945	5,606	6,557	5,927	7,393	8,831	9,049	8,302
U. S. imports..	3,287	4,123	4,783	5,925	5,621	6,532	7,257	5,787	3,509
U. S. imports :									
as percentage:									
of total.....	67.6	83.4	85.3	90.3	94.8	88.4	85.2	64.0	42.3
Wheat grain									
Total imports..	---	---	---	---	---	---	---	---	4,313
U. S. imports..	---	---	---	---	---	---	---	---	2,391
U. S. imports :									
as percentage:									
of total.....	---	---	---	---	---	---	---	---	55.4
Tobacco, unmanu-									
factured									
Total imports..	4,497	4,477	4,053	4,525	4,172	3,658	3,307	3,613	3,300
U. S. imports..	3,345	3,454	3,349	3,459	3,311	2,817	2,754	2,955	2,995
U. S. imports :									
as percentage:									
of total.....	72.8	77.1	82.6	76.4	79.4	77.0	83.3	81.8	90.8
Dry milk									
Total imports..	186	345	374	602	747	916	1,366	1,196	1,582
U. S. imports..	---	107	43	9	26	<u>1/</u>	77	<u>1/</u>	107
U. S. imports :									
as percentage:									
of total.....	---	31.0	11.5	1.5	3.5	---	5.6	---	6.8
Condensed milk									
Total imports..	1,349	1,286	1,828	2,033	2,200	2,732	3,918	4,004	4,757
U. S. imports..	---	---	---	---	---	---	---	---	2
Meat products									
Total imports..	448	748	1,109	1,421	1,565	1,848	2,189	1,906	1,464
U. S. imports..	---	---	---	---	---	<u>1/</u>	242	<u>1/</u>	169
U. S. imports :									
as percentage:									
of total.....	---	---	---	---	---	---	11.1	---	11.5
Cigarettes									
Total imports..	244	321	182	261	340	283	453	496	380
U. S. imports..	---	---	---	---	.5	<u>1/</u>	29	<u>1/</u>	54
U. S. imports :									
as percentage:									
of total.....	---	---	---	---	---	---	6.4	---	14

1/ Breakdown by countries not available.

The original study states that under competitive conditions there is no possibility of wheat being produced in Nigeria. It further states that some wheat has been grown in the extreme north of the country, but at an uneconomic cost. The Nigerian 6-year development program (1962-68) states: "It is the declared policy of the Government to expand the cultivation of wheat in suitable areas in order to raise production to 24,000 tons per year (800,000 bushels) and to achieve this target, over 50,000 acres of land will be needed."

Implications: With due respect for the government policies, the potential for increasing wheat production in Nigeria appears limited. The water supply and topography limit the wheat acreage which can be brought under irrigation. The quality factor also inhibits Nigeria's reliance on domestic wheat production to supply her flour needs. Nigerians have become accustomed to some of the best baking flours in the world. Finding and developing good milling wheats adapted to Nigeria's soil and climatic conditions appears unlikely unless there is a major research breakthrough. Wheat and wheat flour imported by Nigeria are consumed primarily in the form of white bread. The sale of crackers and cookies has been expanding, however, and Nigerian wheat appears best suited for this market.

There is a possibility that Nigerian wheat could be blended with imported varieties without appreciably reducing the baking qualities of the flour blend. Nigeria has been importing Hard Red Winter and Hard Red Spring Wheat from the United States. Although the potential for domestic wheat production in Nigeria is limited, the Government may sometime in the future induce flour mills to use Nigerian wheat in their blends. To prepare for this possibility, research is needed to determine the blending properties of U. S. wheats with varieties being developed for high yields in Nigeria. Agri-Research Inc., Manhattan, Kans., has prepared a 328-page report for Great Plains Wheat, Inc., Garden City, Kans., titled "The Market Potential for Wheat Products in Nigeria." This report concurs with and expands on the implications presented here.

The study by the University of Edinburgh projects Nigeria's imports of wheat to approximately 3.3 million bushels by 1965 and 6.3 million bushels by 1975 (table 5). These figures appear low, as Nigeria imported nearly 4 million bushels of wheat in 1962.

From 1955 to 1960 the United States supplied Nigeria with 80-95 percent of her wheat needs. Canada increased its share of the market, through price incentives, from 16 percent in 1960 to 46 percent in 1962. In the first 6 months of 1963, however, Canada's share of the market dropped below 10 percent. It is projected that the United States will retain, at a minimum, two-thirds of the Nigerian wheat market in 1965 and 1975. This would mean that the United States can expect to export to Nigeria at least 2.2 million bushels of wheat in 1965 and 4.2 million bushels by 1975.

Tobacco

Nigeria imported 4.3 million pounds of unmanufactured tobacco in 1961 and less than 4.2 million in 1962. This compares with an average of 6.1 million pounds during the 1950's. The United States supplies about two-thirds of Nigeria's leaf imports, while India and Rhodesia supply most of the balance.

The demand for unmanufactured tobacco imports depends largely on three factors: The demand for tobacco for chewing and snuffing, the demand for local cigarettes, and the amount of imported tobacco used in making local cigarettes. Although tobacco bought for the manufacture of cigarettes and that intended for direct consumption is not listed separately in import figures, it is known that before 1951 unmanufactured tobacco was imported only for chewing and snuffing and

Table 5.--Nigeria: Imports of wheat and wheat flour, in wheat equivalent, by country of origin, 1954-62, and projections for 1965 and 1975

Year	Total <u>1/</u>	U. S.	Canada	U. S. imports as percentage of total
	<u>1,000 bu.</u>	<u>1,000 bu.</u>	<u>1,000 bu.</u>	<u>Pct.</u>
1954.....	1,445	978	456	68
1955.....	1,501	1,240	252	83
1956.....	1,800	1,535	241	85
1957.....	2,303	2,103	174	91
1958.....	2,103	2,001	55	95
1959.....	2,610	2,292	317	88
1960.....	3,147	2,592	516	82
1961.....	3,171	2,014	1,107	64
1962.....	3,983	1,946	1,914	49
1965.....	3,300	2,200	<u>2/</u>	67
1975.....	6,300	4,200	<u>2/</u>	67

1/ Includes other countries.

2/ Not projected.

was less than 5 million pounds. Since 1954 the quantity imported for this purpose has slowly declined, and, in 1959 it was under 3 million pounds. As 4.9 million pounds of unmanufactured tobacco were imported in 1959, about 1.9 million pounds were used in the manufacture of cigarettes.

Consumer surveys indicate that tobacco is one of the few imported goods on which the expenditure of the higher income groups is less than that of the national average, which in this case is over 2 percent. Expenditure on cigarettes is higher among artisans and laborers than among clerks.

The imported tobacco content in Nigerian manufactured cigarettes has been gradually declining, from about 45 percent by weight in 1951 to 22 percent in 1959, although there has been an increase in the amount of tobacco imported. The reason for this reduced proportion of imported tobacco in Nigerian cigarettes is partly a greater emphasis recently on brands containing a high proportion of "air-cured" tobacco, which is easily obtained locally, and partly because of an increase in Nigerian production of the "flue-cured" type. A sharp tax increase on quality brands containing flue-cured tobacco in 1960 resulted in a decline in flue-cured imports. Since then, manufacturers have begun to use more domestic tobacco and have shifted to greater production of lower priced cigarettes. Local supplies of flue-cured tobacco are still insufficient to meet demand.

During the past decade, the value of cigarette imports has varied from \$180,000 to \$500,000. Virtually all of the cigarettes imported come from the United Kingdom; however, cigarette imports from the United States have increased in value from \$500 in 1958 to \$54,500 in 1962.

Implications: U. S. exports of unmanufactured tobacco to Nigeria in 1965 and in 1975 will probably be about 2.8 million pounds (table 6). It is projected that Nigeria's increasing demand

Table 6.--Nigeria: Imports of unmanufactured tobacco by country of origin, 1954-62, and projections for 1965 and 1975

Year	Total <u>1/</u>	U. S.	Rhodesia	U. S. imports as percentage of total
	<u>1,000 pounds</u>	<u>1,000 pounds</u>	<u>1,000 pounds</u>	<u>Percent</u>
1954.....	7,482	4,646	2,157	62.1
1955.....	6,141	3,979	1,811	64.8
1956.....	5,526	3,997	1,096	72.3
1957.....	5,928	3,934	838	66.4
1958.....	5,300	3,637	1,052	68.6
1959.....	4,946	3,125	1,087	63.2
1960.....	4,125	2,838	460	68.8
1961.....	4,321	2,947	1,023	68.2
1962.....	4,193	3,736	291	89.1
1965.....	4,200	2,800	<u>2/</u>	66.7
1975.....	4,200	2,800	<u>2/</u>	66.7

1/ Includes other countries.

2/ Not projected.

will be met by increased local production. Thus the country's level of imports in 1965 and 1975 will be approximately equivalent to its level of imports during 1960, which was 1,900 metric tons (4.2 million pounds). It is further projected that the United States will retain approximately 67 percent of the Nigerian market for unmanufactured tobacco, quantity basis, and 80 percent of the market on a value basis.

No projections are made on cigarette imports. Nigeria does not import large quantities of cigarettes from the United States. While U. S. cigarettes are preferred to local cigarettes by most Nigerians, lack of purchasing power and restrictive tariff policies reduce the market potential. Also, the output of Nigerian cigarette factories is increasing. The United Kingdom will probably continue to supply the bulk of Nigeria's demand for imported cigarettes.

Dairy Products

The rise in Nigeria's milk imports in the last decade has been steeper than that of any other commodity mentioned in this report. Excluding malted milk compounds, value rose from \$420,000 in 1949 to \$5,400,000 in 1960, a 13-fold rise. The increase has been a steady one, with the total doubling every 3 years. Dry milk imports have risen thirtyfold since 1949, and by 1962 accounted for over a quarter of the total. Imports of sweetened and unsweetened condensed milk, which now constitute 70 percent of the total, have each increased tenfold during this time.

In 1953 the Netherlands supplied almost all the condensed and 70 percent of the dry milk, her only rivals in the latter field being New Zealand and Denmark. By 1962, although the Netherlands still accounted for 95 percent of the condensed milk, her share of the dry milk imports had fallen to 30 percent; Denmark supplied 18 percent and the United States, 15 percent.

Low income and lack of information on proper nutrition have kept dairy product consumption at a very low level. In 1961 the milk equivalent per capita consumption was about 34 pounds per

year; that in the United States was over 600 pounds. The typical Nigerian diet is heavy in carbohydrates and low in protein. Increased consumption of dairy products would help correct this nutritional deficiency.

Urban surveys suggest that milk consumption is closely related to occupation and income. Urbanization will tend to accelerate demand for milk imports. Dry milk is likely to increase its share of the total market, as it is preferred by the better paid Nigerians, is used by a number of major institutions, and is believed to be most nourishing for mothers before and after childbirth. Since Nigerian palm oils can be combined with skim milk, future imports of dry milk are expected to be primarily nonfat dry milk.

There is virtually no possibility that Nigeria will approximate self-sufficiency in milk production by 1975. The poor production characteristics of the native Zebu milk cows, disease and weather impediments, difficulty in developing improved breeds, and the difficulty in transmitting advanced farm management practices to Nigerian farmers will result in a deficit of milk production in Nigeria for at least a quarter of a century.

Implications: The U. S. share of the condensed milk imports will be of little significance by 1975 as the Netherlands will very likely retain the major share of this market. No import levels of condensed milk are projected for 1965 and 1975 (table 7).

Nigeria's imports of dry milk are projected to reach 7.8 million pounds by 1965 and 34.6 million pounds by 1975. Increased knowledge of the nutritional value of dairy products and rising incomes are expected to double dry milk imports every 4 years between 1960 and 1972, and then increase at a slower rate.

Table 7.--Nigeria: Imports of condensed milk by country of origin, 1954-62

Year	Total <u>1/</u>	U. S.	Netherlands	U. K.	Denmark
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1954.....	3.8	---	2.9	.9	---
1955.....	3.3	---	3.0	.2	---
1956.....	4.8	---	4.5	.1	---
1957.....	5.1	---	4.8	.2	---
1958.....	5.5	---	5.2	.2	<u>2/</u>
1959.....	7.1	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>
1960.....	10.0	---	9.4	.2	.3
1961.....	10.2	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>
1962.....	11.9	<u>2/</u>	11.3	.4	.2

1/ Includes other countries.

2/ Less than 50 metric tons.

3/ Breakdown by countries not available.

U. S. commercial development of the Nigerian dry milk market so far has been practically nil. Nearly all of the U. S. dry milk exports to Nigeria have been under Title III of P. L. 480 (donations by charitable organizations). No commercial exports of dry milk from the United States to Nigeria are projected for 1965. It is projected that by 1975 commercial U. S. exports of dry milk to Nigeria will approach 3.1 thousand metric tons or 6.9 million pounds (table 8). Nigeria's dry milk imports in 1975 will be mainly nonfat dry milk.

Table 8.--Nigeria: Imports of dry milk by country of origin, 1954-62, and projections for 1965 and 1975

Year	Total ^{1/}	U. S.	U. K.	Netherlands	U. S. imports as percentage of total
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent
1954.....	.2	---	.1	.1	---
1955.....	.3	.1	.1	.1	33.3
1956.....	.4	.1	.1	.2	25.0
1957.....	.6	---	.3	.3	---
1958.....	.8	.1	.4	.3	12.5
1959.....	1.0	<u>2/</u>	<u>2/</u>	<u>2/</u>	---
1960.....	1.6	.1	.6	.6	6.2
1961.....	1.6	<u>2/</u>	<u>2/</u>	<u>2/</u>	---
1962.....	2.4	.4	.8	.7	16.7
1965.....	3.6	<u>3/</u> .5	<u>4/</u>	<u>4/</u>	15.0
1975.....	15.7	3.1	<u>4/</u>	<u>4/</u>	20.0

^{1/} Includes other countries. ^{2/} Breakdown by countries not available.
^{3/} Donation under P. L. 480. ^{4/} Not projected.

While the prospects for commercial sales by 1965 appear to be negligible, the potential by 1975 may be substantial, especially if prefaced by carefully prepared and presented promotional effort. Shipments of dry milk in large containers, such as 50-pound bags, is practical only if the entire contents can be used on the day the bag is opened. The high humidity prevailing throughout the country causes the powder to harden shortly after a bag has been opened. Nigerians have shown a preference for dry milk packaged in humidity-resisting cans which, in addition, subsequently provide containers for storage.

Meat

Meat imports, particularly imports of fresh, chilled, and frozen meat, have risen rapidly since 1954 and now constitute almost half the total meat imports. Corned beef, other canned meat, sausages, etc., share the bulk of the remainder almost equally. The recent decline in imports of canned meats, particularly corned beef, may be attributed to the effective competition offered by a Nigerian canning company. This firm aims its product solely at the African market, and the meat is cheaper than the imported variety. Nevertheless, imported corned beef may become popular as more people are able to afford it.

Imports of fresh, chilled, or frozen meat are purchased mainly by Europeans but contain an element of African demand among households of the higher income group in the more important cities. Refrigerators are now being bought by such households, stimulating purchases of frozen meats.

The Nigerian 6-year development plan calls for increasing livestock production by 5 percent per year. To accomplish this, a substantial investment will be required in veterinary work, reclamation of grazing land, development of rotation grazing, improved access to water, removal of trees and scrub, drylot feeding, increased production of sown and arable crops, and improved slaughtering and marketing facilities. Many problems are involved in attaining this objective, one of the biggest being the established nomadic and seminomadic ways of handling cattle and the resulting way of life which is so ingrained in the cattle-raising tribes.

Implications: The United States has a very small part of the Nigerian meat market, probably for two reasons. The smallness of the market makes it unattractive to U. S. suppliers. Second, and more important, meat products can be bought cheaper in countries other than the United States.

The duty of 50 percent ad valorem on all meat (fresh, chilled, or frozen, including poultry and game) was increased to 66 2/3 percent ad valorem on March 9, 1964. These duties plus the initial high cost of imported items restrict the potential customers to the Europeans or expatriates residing in Nigeria and the Nigerians with high incomes. The total number who can afford imported meats is believed to be less than 50,000 people.

Nigerian importers have indicated that the prices of U. S. meat products are not competitive. All major importers are firms with their head offices in England or other European countries. These firms have contacts with U. S. exporters, but there has been little business in livestock products.

No projections are made for U. S. meat imports in 1965 and 1975 (table 9). The market for U. S. meats in Nigeria is a limited one and is likely to remain so for some time. To compete, U. S. products must be competitive pricewise, acceptable, and available in the local market. As the Nigerian economy develops, with a rise in the standard of living and relaxation in austerity measures, it is logical to expect an increase in the demand for quality food.

Table 9.--Nigeria: Imports of meat and meat preparations by country of origin
1954-62

Year	Total ^{1/}	U. S.	New Zealand	U. K.	Denmark	Argentina	U. S. imports as percentage of total
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent
1954.....	.5	---	---	.1	---	.1	---
1955.....	.8	---	.1	.2	---	.2	---
1956.....	1.3	---	.3	.3	.1	.4	---
1957.....	1.7	---	.3	.4	.1	.3	---
1958.....	2.0	<u>2/</u>	.3	.6	.2	.6	---
1959.....	2.3	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>	---
1960.....	2.8	.2	---	1.0	.4	.2	7.1
1961.....	2.5	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>	---
1962.....	2.0	.2	.5	.3	.3	.3	10.0

^{1/} Includes other countries.

^{2/} Less than 50 metric tons.

^{3/} Breakdown by countries not available.

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